

FIG. 1

Intestinal lumen

FIG. 2B

F1G. 2A

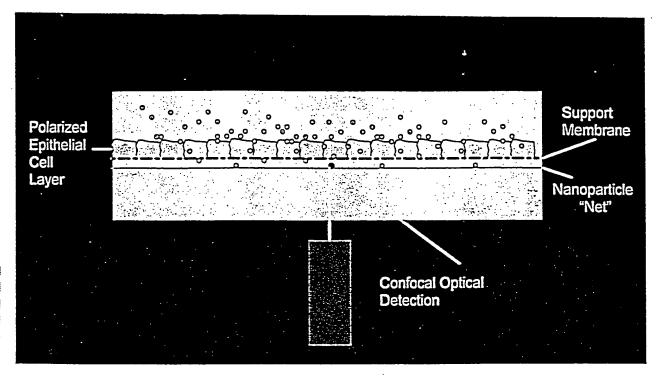


FIG. 3

Substrate-mediated Efflux

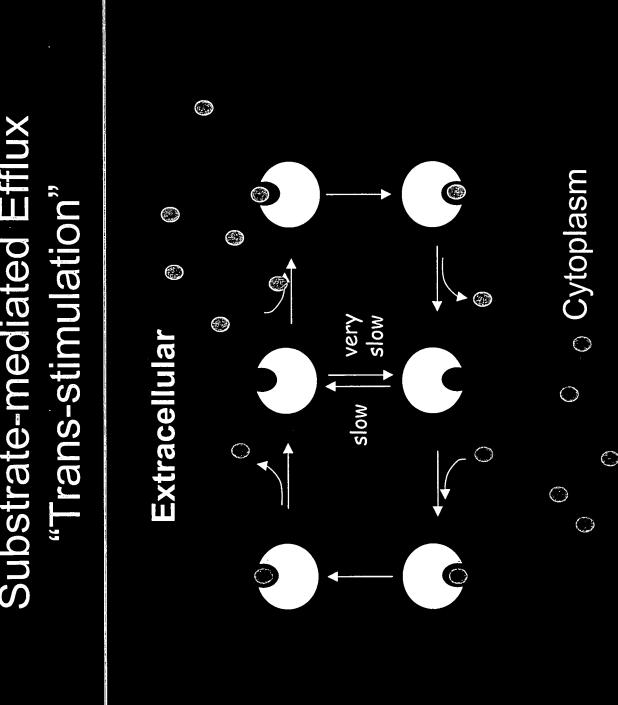
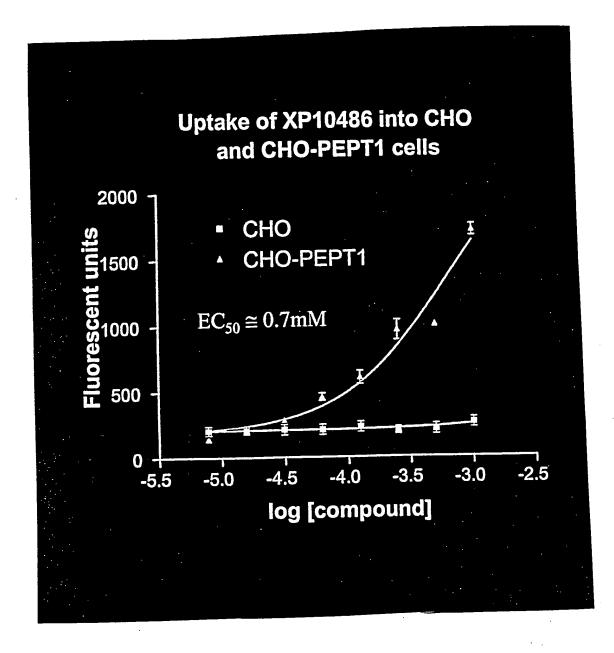
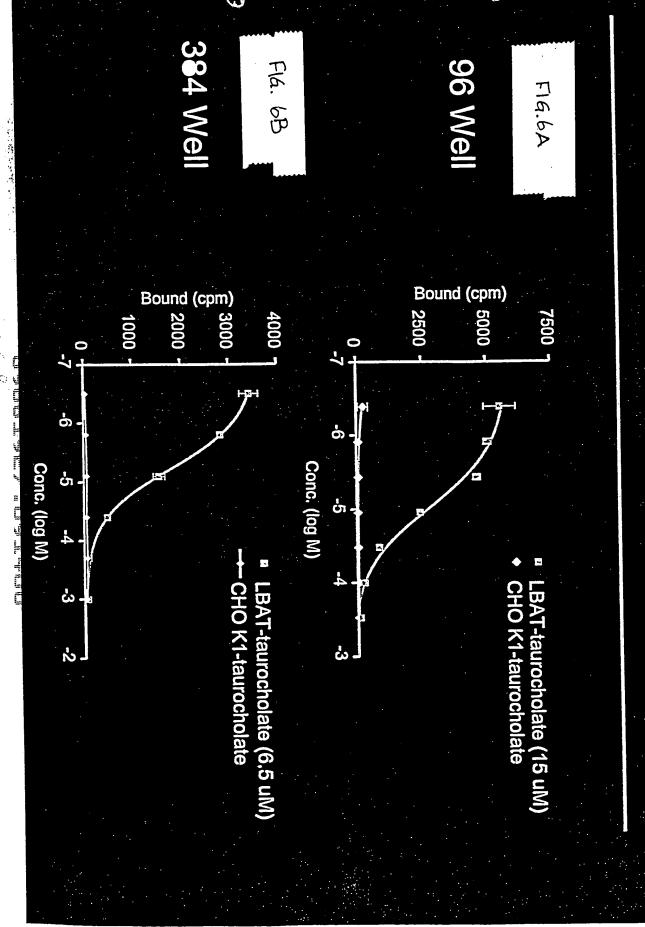


FIG. 4



F16.5

BAT Competition in 96 and 384 Well Formats



10 Pools from 200-Member Fluorescent Dipeptide Library

FIG. 7

Synthesis of a Dipeptide Library

Fmoc-N
$$\stackrel{}{\underset{}}$$
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F16.8

Synthesis of β -Lactam Library

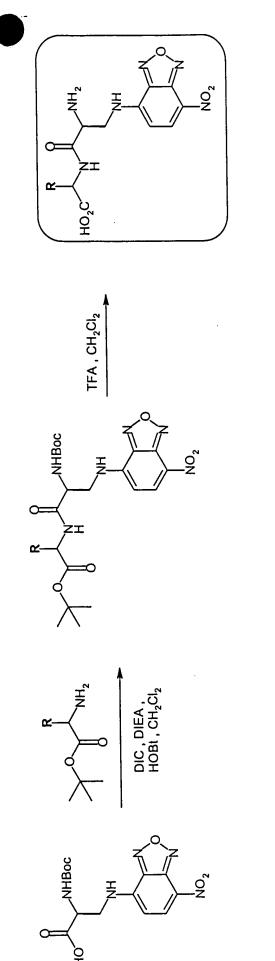
F16, 9

Synthesis of Fluorescent PEPT1 Substrate XP10486

Using Combinatorial Potential of Dipeptide Motif to Rapidly Establish

Structure-Activity Relationships for PEPT1

F16.11



-16. 12

(i) Piperidine, DMF

(i) PhSNa , DMF

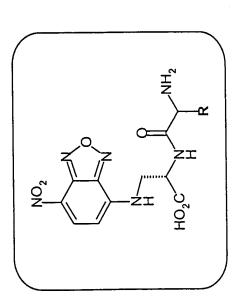
DIC, DIEA, HOBt, CH₂Cl₂

(iii) [Pd(PPh₃)], , Me₃SiN₃ , THF (iv) NBD-CI , K₂CO₃ , EtOH

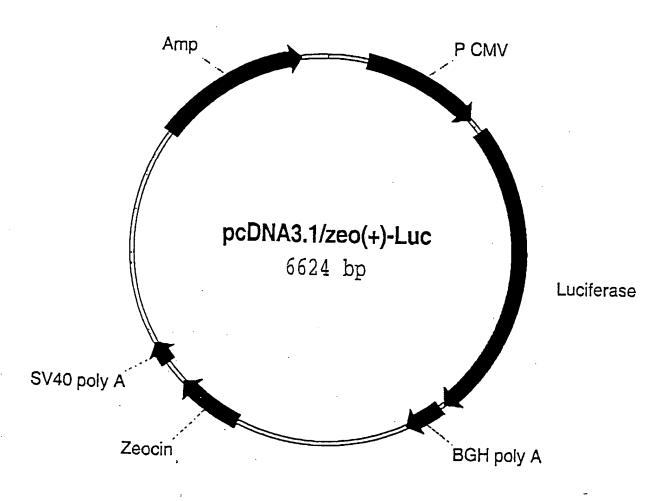
(v) TFA, CH₂Cl₂

F1G. 13

DIC, DIEA, CH2Cl2



F19. 14



F16. 15

Synthesis of Luciferin-Conjugated Dipeptide GP5-71

Synthesis of Luciferin-Glycocholate Ester Conjugate CZ15-73

F16.17

(ii) TFA, CH2Cl2

Bile Acid - Luciferin Conjugate Librar γ

- (i) R1 = OH; R2 = α -OH (ii) R1 = OH; R2 = H (iii) R1 = H; R2 = α -OH

- (iv) R1 = H; R2=β-OH (v) R1 = H; R2 = H

FIG. 18

Synthesis of Conditionally Fluorescent Dipeptide GP5-75-2

G5-75-2

Synthesis of Conditionally Fluorescent Dipeptide GP5-77

Synthesis of Conditionally Fluorescent Dipeptide GP5-00

F1G. 21

Preparation of Cholyl-L-Lys-(E-NBD)-OH

F16, 22

Preparation of Cholyl-Lysine Conjugate of Naproxen

F16. 23

Preparation of Cholyl L-Dopa

F1G. 24

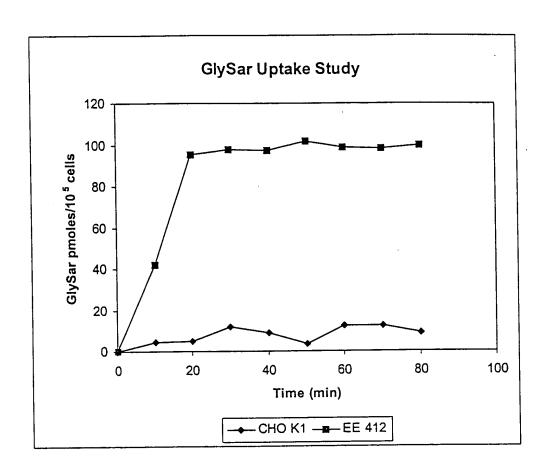
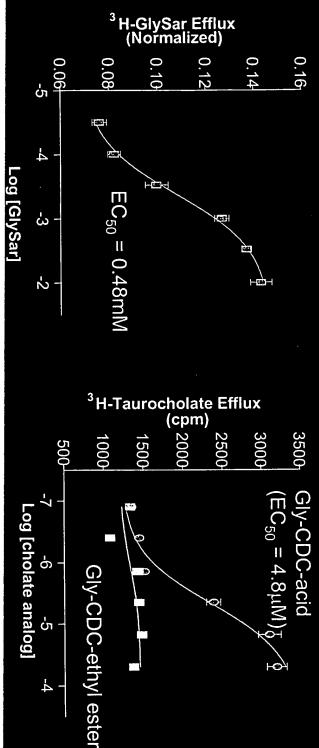


FIG. 25

rans-stimulation Assays



³H-Taurocholate efflux by Cholate analogs in CHO-LBAT cells

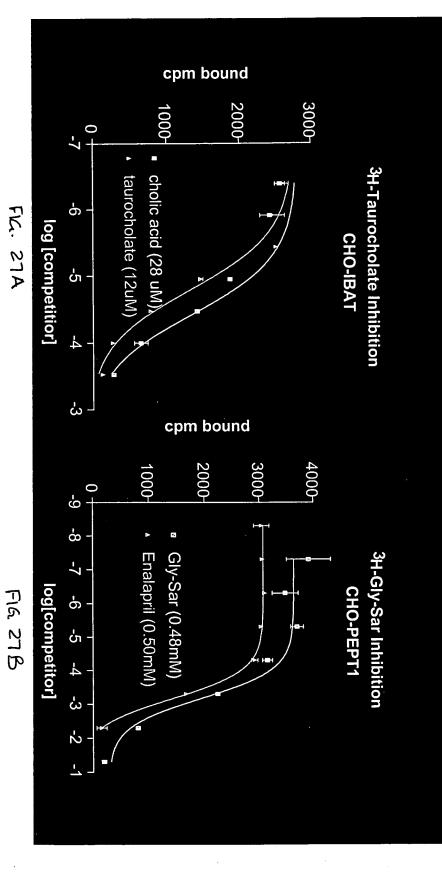


F14. 26 B

-4

FIG. 26 A

Inhibitory Activity of Known Substrates



F16, 28

FIG. 30